



Maryland Department of Agriculture

Agriculture | Maryland's Leading Industry

Office of the Secretary

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Earl F. Hance, Secretary
Mary Ellen Setting, Deputy Secretary

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April 2, 2013

Twanda Maignan, Team Leader
Emergency Response Team
U.S. EPA Office of Pesticide Programs (7504P)
Document Processing Desk (EMEX)
1200 Pennsylvania Avenue, NW
Washington, DC 20460-001

Re: Regions FIFRA § 18 Emergency Re-Certification – File Symbol 12-MD-04

Dear Ms. Maignan:

In accordance with 40 CFR 166.20(b) (5), the Maryland Department of Agriculture is requesting re-certification of the FIFRA § 18 Emergency Exemption for use of bifenthrin on stone and pome fruit to control Brown marmorated stink bugs (BMSB). The exemption permitted use of Brigade WSB Insecticide/Miticide (EPA Reg. No. 279-3108) manufactured by FMC Corporation, Bifenture EC Insecticide (EPA Reg. No. 70506-277) and Bifenture 10DF Insecticide (EPA Reg. No. 70506-57) manufactured by Untied Phosphorus, Inc., under their respective Section 18 labels. This is a regional request which is supported by New Jersey, Pennsylvania, Delaware, Virginia, West Virginia, as well as Maryland.

Each state will submit a letter affirming their support along with a completed Expedited Emergency Exemption (Section 18) Request form and any necessary final reports for the 2012 exemption separately to EPA. The attached narrative was prepared by Bryan Butler, Senior Extension Agent, University of Maryland. The narrative discusses the current status of the BMSB and its economic impact in 2012 throughout the region.

In addition to the narrative, a copy of the completed Expedited Emergency Exemption (Section 18) Request form for Maryland is attached, as well as, draft labels and Letters of Support from the Registrants of the three bifenthrin products covered under the exemption. The labels will be updated with the correct data range once approved. The original application for an

Emergency Exemption was submitted on May 14, 2012 and was approved by EPA on July 20, 2012 as File Symbol 12-MD-04 (apple), 05 (peach), and (06) nectarines. The Final Report for the 2012 Emergency Exemption is enclosed.

The Pesticide Regulation Section of the Maryland Department of Agriculture will ensure all provisions of this request are honored. If you require any further information, please do not hesitate to contact Mr. Dennis Howard, Program Manager for the Pesticide Regulation Section at (410) 841-5710 or email at dennis.howard@maryland.gov. Your assistance in this matter is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Mary Ellen Setling for".

Earl F. Hance
Secretary

EFH/gc
Enclosures
cc: Dennis Howard
Bryan R. Butler

Application for Section 18 Expedited Emergency Exemption

Type of Exemption Being Requested

- ☒ SPECIFIC
☐ QUARANTINE
☐ PUBLIC HEALTH

Contact Person(s) and/or Qualified Experts(s)

CONTACT PERSON:

Name: Dennis W. Howard
Title: Chief, Pesticide Regulation Section
Organization: Maryland Department of
Agriculture
Address: 50 Harry S. Truman Parkway
Annapolis, Maryland 21401
Phone: 410-841-5710
FAX: 410-841-2765
Email: dennis.howard@maryland.gov

QUALIFIED EXPERT:

Name: Bryan R. Butler, Sr.
Title: Senior Extension Agent
Organization: University of Maryland Extension
Address: 700 Agricultural Center
Westminster, Maryland 21157
Phone: 410-876-386-2760
FAX: 410-876-0132
Email: bbutlers@umd.edu

Description of Pesticide Requested

Common Chemical Name: (Active Ingredient) bifenthrin (IRAC Group 3 Pyrethroids)

Brand/Trade Name(s):

Brigade WSB, Bifenture EC, and Bifenture 10DF

Formulation: WSB, EC, 10DF, respectively
10%,

EPA Reg. Nos.:

279-3108, 70506-227 and 70506-57

% Active Ingredient: 10%, 25.1%, and
respectively.

Manufacturer(s): FMC Corporation Agricultural Products Group and United Phosphorus Inc.,

Address:

1735 Market Street Philadelphia, PA. 19103 USA,

630 Freedom Business Center, Suite 402 King of Prussion, PA. 19406 USA

Expedited Emergency Exemption (Section 18) Request

The Maryland Department of Agriculture requests a specific emergency exemption under the provisions of Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended, for use of bifenthrin, formulated as the products Brigade WSB Insecticide/Miticide (EPA Reg. No. 279-3108), Bifenture EC (EPA Reg. No. 70506-57), and Bifenture 10DF (EPA Reg. No. 70506-227), on pome and stone fruit (Apples, Peaches & Nectarines) to control brown marmorated sting bug, *Halyomorpha halys*, and incorporates by reference all information submitted in the previous application dated 5/14/2012.

This is the second year that the Maryland Department of Agriculture has requested this use. The Maryland Department of Agriculture asks that this specific exemption request be processed as eligible for a streamlined repeat as allowed by 40 CFR 166.20(b)(5).

In accordance with the regulations, the Maryland Department of Agriculture hereby certifies the following (check on that applies for each numbered item) and, if applicable, attach additional information.):

1. ☒ The emergency condition(s) described in the previously submitted emergency exemption application continue to exist.
2. ☐ All information submitted in the previously submitted emergency exemption application is still accurate, or
☒ Except as expressly identified in the attached document, all information submitted in the previously submitted emergency exemption application is still accurate.
3. ☒ The proposed conditions of use are identical to the conditions of use EPA approved previously for emergency File Symbol # 12_MD-04 (apple), - 05 (peach), & - 06 (nectarine), dated July 20, 2012; or
☐ The proposed conditions of use are identical to the conditions of use EPA approved previously for emergency File Symbol , dated: , except as expressly identified below:
 - A.
 - B.
 - C.
4. ☒ There were no additional conditions or limitation on the eligibility for recertification identified in the previous notice of approval; or
☐ Any conditions or limitations on the eligibility for recertification identified in the previous notice of approval of the exemption have been satisfied (explanation attached).
5. ☒ The applicant has not newly become aware of any alternative chemical or nonchemical practice that may offer a meaningful level of pest control; or

_____ If any such new alternative controls are available, documentation is provided that demonstrates that each such known chemical or practice does not provide adequate control or is not economically or environmentally feasible (explanation attached).

6. X A final or interim report was submitted is attached.

Request for an Expedited Emergency Exemption (Section 18) for Use of Bifenthrin against Brown Marmorated Stink Bug, *Halyomorpha halys* (Stål), in Eastern Fruits

Submitted on March 21, 2013 by Bryan R. Butler Sr.

University of Maryland Extension

SUMMARY

Brown marmorated stink bug (BMSB) continues to represent a significant risk to tree fruit production in the mid-Atlantic region, with some variation in risk level among states, individual orchards within states, and crop type/variety. Bifenthrin is an important management tool for BMSB, having shown excellent efficacy against it in laboratory and field studies in 2011. No alternative management options for BMSB became available in the preceding 12-month period. The loss of endosulfan for use in stone fruits on July 31, 2012 will further reduce grower options for managing BMSB in peaches. No changes in the bifenthrin use patterns approved in 2012 for pome and stone fruit crops are sought.

BMSB STATUS UPDATE

The following narrative addresses the current status of BMSB as a pest of tree fruits in mid-Atlantic orchards, in support of an expedited emergency exemption request for use of bifenthrin in apple, peach and nectarine orchards in Virginia, West Virginia, Maryland, New Jersey, Pennsylvania, Delaware, and North Carolina.

Economic Impact in 2012: The information used to develop the following summary of BMSB impact to mid-Atlantic tree fruits in 2012 was obtained from fruit processors (2), the National Peach Council, and research and extension entomologists from NC, VA, WV, DE, MD, PA, and NJ. Data from entomologists are based on grower and orchard surveys and/or the results from a research study. Quantifying the regional economic impact of BMSB injury to pome and stone fruit following the 2012 season has proved to be virtually impossible due to 1) a general lack of BMSB-specific injury records, 2) an unknown overall impact on the grading and value of BMSB-injured fruit received by processors, and 3) a lack of data on wholesale and direct market value losses.

Collection of damage data has proven to be particularly problematic as the packers and processors do not specify the nature of the damage that causes culls; thus, it is impossible to clearly attribute culls to any one reason.

Another issue in several states was that the population surge in September and damage went unnoticed until it began to be removed from storage which will continue for some time. As a result, damage that was not visible at harvest was detected much later after apples had passed through channels of trade to packers and processors, who unfortunately do not typically collect pest-specific injury data relative to storage losses (i.e., these are apples that were already inspected, graded, and stored shortly after harvest—after they are in possession of the packer/processor, subsequent losses are simply culled out without rigorous data collection that would result in a downgrade to a grower, for example.)

It has been very difficult to clarify how the amount of damaged fruit translates into how great a monetary loss is experienced by the producer. (i.e., does 20% damage really equal 20% total loss?) It can be total loss leading to rejection of a load or culling fruit for fresh market sales. It can end up on the ground in a pick your own operation, which is very difficult to track, or some fruit can be processed at a reduced value. Regardless, there is new loss to producers never experienced prior to the emergence of BMSB in the mid-Atlantic which has proven to be very difficult to manage with the materials currently available.

National Peach Council (February 28, 2013) (stone fruit) In our surveys of peach producers and crop insurance representatives in the mid-Atlantic region where the infestation of BMSB is most severe, we learned the following:

- 2012 crop damages ranged from 3 percent to 22 percent due to the feeding damage caused by the pest.
- While these damages were down slightly in some areas, others continue to experience severe injury as a result of the pest. The continued use of pesticides assists the growers in combating the pest, specifically bifenthrin helped to control the pest.
- Weather conditions from year to year have varied dramatically and remain an unknown factor in the quest to combat the BMSB. With the milder than normal winter that has concluded, the impact of the BMSB to the 2013 crop remains to be seen and the current use of bifenthrin and dinotefuran (Venom[®]) appears to have a positive impact on minimizing the damage to peaches caused by the BMSB.
- The states continuing to feel the largest impacts of the BMSB are Maryland, Virginia and Pennsylvania, with New Jersey close behind. When the March 2013 Non-citrus Fruits & Nuts 2012 Preliminary Summary is published by USDA, National Agricultural Statistics Service, we expect that it will show the value of the 2012 utilized production was up in most of these states (versus 2011) and this is directly tied to the price which was up as well. However, the overall production costs, due to increased use of spray materials to combat BMSB and the current labor situation, mitigated any actual bottom line gains to the peach producers in 2012. This is the second consecutive year that the growers have experienced this impact. New Jersey (April 18, 2012) “Out of 89 apple samples, an average of 9.75% damage was found, some fruit with over 10-15 feeding sites per fruit. Out of 38 peach and nectarine samples, an average of 20.6% fruit damage was found. Some blocks had up to 55% damaged fruit. ...those that are harvested after mid-August tended to be most highly damaged. Most damaged fruit in the worst infested blocks

had over 10 feeding sites per fruit. ... 5% damage in peaches could cost a grower \$390/acre, while 20% damage may cost a grower over \$1,500/acre (based on late season wholesale prices @ \$13/box). Retail losses would be even higher.”

Maryland (February 28, 2013) Destructive fruit sampling of seven orchards that produced both apples and peaches in MD (estimated to represent about 20% of the MD industry) showed that average total crop loss to apples ranged from 3 to 82% (average = 20.06%). For peaches, the average total crop loss ranged from 0 to 39% (average = 10.53%). It should also be noted that this level of control was achieved using Thiodan which will not be available for use on peach in 2013.

West Virginia (February 28, 2013) “... damage at harvest ranged from 1% - 19% in peaches (regional average = 7.3%). In apples, the range was from 0% - 22% (regional average = 7.1%). In terms of severity, some of the fruit was still marketed directly to consumers, some was downgraded from fresh market to processing, and some was culled completely. ... growers treated much more aggressively, increasing their overall costs in terms of materials, fuel, time, labor, and equipment maintenance. It should also be noted that this level of control was achieved using thiodan which will not be available for use on peaches in 2013. We did see substantial pressure throughout the season. Growers who were not aggressively spraying until the end of the season at all experienced increasing injury.”

Delaware (February 28, 2013) Although the percentage damage in fruit from BMSB was a bit lower in 2012 versus 2011, with the freezes and price of fruit this past year being much higher, the dollar losses were higher than in 2012 v 2011. Apple prices were up probably 40% in 2012 v 2011 and peach prices were up probably 20% from the year prior. With that said, the dollar losses from BMSB damage would be higher in 2012 versus 2011. Growers calculated the loss from BMSB in fruit in 2012 to be a \$450 per acre loss.

A study involving entomologists from several institutions was conducted in fall 2011 and 2012 to measure the distribution of BMSB injury to late season apples in commercial apple orchards in VA, MD, PA and NJ. Fruit samples were taken from the top, middle, and lower canopy of trees in border, interior, and intermediate orchard zones in 18 orchards just before commercial harvest of the selected varieties and assessed for external and internal injury from BMSB. Across the orchards, total BMSB injury ranged from 3.11 to 79.6% (mean = $32.4 \pm 4.9\text{SE}$) in 2011 and averaged 25.9% damage in 2012.

Overall, average % BMSB injury is 25.09. This is based on 450 fruits sampled per block.

VA	%injury	MD	%injury	PA	%injury	NJ	%injury
PG	3.11	B	17.33	D	79.55	H	27.77
BS	4.88	G	41.56	R A	24.4	H	14.44
JS	19.55	M	4.22	R B	8.66	S	17.11
				F	44.22	H	29.11
				B	40.44		
Ave.	25.09						

In summary, BMSB injury was lower overall in 2011 than in 2010 and varied widely among states and orchards. Although lower levels of fruit injury in many orchards likely reduced the direct economic impact of BMSB, the increased cost of spray programs was widely reported. Some states within the region (e.g. NC and NY) continued to report low levels of injury, while highest injury reports continued to be from areas most heavily impacted in 2010.

Response to BMSB by Tree Fruit Producers in 2012: Many growers implemented very aggressive insecticide-based management programs in 2012, particularly in late August into September. These programs often involved much more frequent insecticide applications than would be used typically and the use of products that would not ordinarily be considered appropriate for post-bloom applications (based on their potentially disruptive effects on natural enemy populations). In general, these programs yielded much lower levels of BMSB injury at harvest than in 2010 but higher than in 2011, with more damage than expected showing up on fruit being removed from storage. However, they are widely viewed by growers and researchers as being unsustainable, adding cost and significantly reversing the cumulative effects of integrated pest management practices. Possibly, some the damage that has shown up late could have been avoided but bifenthrin was only available starting in July of last year. With bifenthrin the early season damage could be prevented and its use may also help keep populations lower so there is a smaller autumn population to manage. This level of damage may also be more severe in 2013, particularly on peach as endosulfan loses its EPA registration. Without bifenthrin as a tool for BMSB control, damage levels could possibly rise to 2010 levels which could have a devastating effect on producers in the mid-Atlantic. There is a very real potential that some growers will actually run out of ANY tools due to exhausting seasonal maximums on existing products, and the loss of endosulfan on peaches.

Current BMSB Pest Status: The numbers of adult BMSBs seeking overwintering sites in private homes and other structures was significantly higher throughout the mid-Atlantic region in fall 2012 than in 2011, and may lead to an emerging overwintering population in spring 2013 to rival populations experienced in 2010. This could contribute to higher levels of injury to peaches and apples in 2013. This general observation was substantiated by an increase in calls from home and business owners in 2012. Although there were some reports of predation and parasitism of BMSB in 2011 and 2012, there were no indications that the effects of these agents were sufficiently widespread or prevalent to impact the overall population.

Despite what appeared to be lower numbers of overwintering BMSB in 2011, the population built during the entire growing season with many locations experiencing very high numbers in orchard from late August through the completion of harvest in apples. All indications are that BMSB pressure in 2013 is going to be much higher from the outset than it was in 2012. Based on our collective experiences in 2010, this risk is of significant concern and does not warrant complacency. Recently overwintering BMSB have been collected from areas containing many thousands of individuals sheltering in barns and outbuildings adjacent to commercial tree fruit orchards in Maryland, and there are similar circumstances encountered in other states. New information on the bug's use of natural overwintering harborage in forests has been generated recently. The effects of mild weather on BMSB survivorship during winter 2012-2013 are

unknown, but intuitively would seem to be more favorable to their survivorship. With only two years of experience with BMSB in the mid-Atlantic region, it is impossible to predict the rate at which populations will build and spread in 2013 and the extent to which it will threaten fruit orchards at various points throughout the season. It does appear that baseline BMSB pressure has varied substantially among orchards within a general area in the mid-Atlantic states for, as yet, unknown reasons. This, coupled with the loss of endosulfan on stone fruit, could put fruit at increased risk in 2013 creating the need for products to fill that void. The biggest stone fruit grower in VA said to me at an extension meeting last week that he feels that he can manage BMSB injury in peaches and nectarines "... if we have bifenthrin."

Management Recommendation for 2013: The primary change to BMSB management recommendations for 2013 is an increased use of alternate-row-middle sprays to maintain fresher residues. This recommendation follows grower experiences in affected states and research data from 2012 suggesting that the residual activity of many products against BMSB is relatively short. Although trapping strategies are making great strides, they have not advanced to the point of being used as a predictive tool and thus grower decisions have to be made based on either actual presence of BMSB in the orchard or damage that has already occurred. For these reasons, it is imperative that they have access to the most effective materials to limit damage to their crop.

- Efficacy comparisons between bifenthrin and currently registered insecticides that are conducted under actual growing conditions indicate in both field and laboratory studies bifenthrin continues to be one of the most effective options for controlling BMSB. (See attached) *Field-Based Residual Efficacy of Selected Insecticides Against Brown Marmorated Stink Bug, Halyomorpha halys (Stål)*
January 7, Tracy C. Leskey
USDA-ARS
Appalachian Fruit Research Station
2217 Wiltshire Road
Kearneysville, WV 25430-2771

ENCLOSURES

MANUFACTURER'S

LETTERS OF SUPPORT

AND

DRAFT SECTION 18

DIRECTIONS FOR USE

FMC Agricultural Products



April 2, 2013

FMC Corporation
1735 Market Street
Philadelphia, PA 19103

Dennis Howard
Maryland Department of Agriculture
Pesticide Regulation Section
50 Harry S. Truman Parkway
Annapolis, MD 21401

215.299.6000 phone
215.299.6468 fax
www.fmc.com

RE: Section 18 Letter of Support

Dear Mr. Howard:

As the registrant for Brigade WSB Insecticide/Miticide (EPA Reg. No. 279-3108), FMC fully supports the proposed renewal of a Section 18 emergency exemption use of the product in Maryland on apples, peaches, and nectarines to control the Brown Marmorated Stink Bug (*Halyomorpha halys*).

FMC is committed to working with IR-4 in their program to obtain Section 3 registrations for use of bifenthrin on pome and stone fruits. IR-4 has field magnitude of the residue trials scheduled to begin this year.

Please contact me by telephone at 215-299-6717 or by email at tim.formella@fmc.com if you have any questions on this matter.

Sincerely,

A handwritten signature in black ink that reads "Timothy M. Formella". The signature is written in a cursive style.

Timothy M. Formella
Senior Product Registration Manager
FMC Corporation

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certificate



Section 18 EXEMPTION

FOR DISTRIBUTION
AND USE ONLY IN
MARYLAND

EPA File Symbols:

EMERGENCY CALLS: 800-331-3148

ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE REGISTERED PRODUCT LABEL FOR BRIGADE WSB (EPA REG. NO. 279-3108) ARE TO BE FOLLOWED

THESE DIRECTIONS FOR USE MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

This exemption is effective from _____ through _____

Crop	Pest Controlled	Rate of Application
Apples, Peaches, Nectarines	Brown Marmorated Stink Bug	12.8 - 32 fl oz/A (0.08 - 0.2 lb ai/acre)

Directions for Use: Application must be made post-bloom, by ground only as a dilute (minimum 200 gallons of finished spray per acre) or concentrate (minimum 50 gallons of finished spray per acre) in sufficient water to provide thorough coverage. Do not apply this product until after petal fall.

Restrictions: Do not apply more than 32 fl oz/acre (0.2 lb ai/acre) per application. Do not apply more than 72 fl oz/A (0.5 lb ai/acre) per year. Do not make applications less than 30 days apart. Do not graze livestock in treated areas. Do not apply within 14 days of harvest. Do not allow entry into treated areas for 12 hours following application.

Any adverse effects resulting from the use of Brigade WSB under this emergency exemption must be immediately reported to the Maryland Department of Agriculture.



FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103

Brigade and **FMC** --FMC Trademarks
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United Phosphorus, Inc.

Sherry B. Hutcheson
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
Phone: (229) 247-9041
Fax: (229) 241-9699

Dennis Howard
Program Manager
Maryland Department of Agriculture
Pesticide Regulation Section
50 Harry S. Truman Parkway
Annapolis, MD 21401

RE: Section 18 Letter of Support for Bifenture EC and Bifenture 10DF Insecticides

Dear Mr. Howard

United Phosphorus, Inc. (UPI) fully supports the Section 18 emergency exemption for use of Bifenture EC and Bifenture 10DF Insecticides, containing the active ingredient bifenthrin for control of Brown Marmorated Stink Bug (*Halyomorpha halys*) on apples, peaches and nectarines in Maryland (and other supporting States). The products we supply are:

- Bifenture EC – EPA Reg. No. 70506-57
- Bifenture 10DF – EPA Reg. No. 70506-227

UPI will be able to supply product to meet the market demand for 2013.

If you have any questions, please feel free to contact me directly at 229-247-9041 or sherry.hutcheson@uniphos.com. If you have technical questions about the product and control of BMSB, please contact Tony Estes at 864-202-7526 or tony.estes@uniphos.com.

Thank you for your time and consideration.

Best regards,

A handwritten signature in black ink, appearing to read 'Sherry B. Hutcheson'.

Sherry B. Hutcheson
Regulatory Affairs Manager

Cc Tony Estes

For distribution and use only in Maryland under an emergency exemption authorized under Section 18 of FIFRA

All applicable directions, restrictions, and precautions on the EPA registered product labels as well as those on these directions for use must be followed. These directions for use must be in the possession of the user at the time of pesticide application.

Products: Bifenture® EC Agricultural Insecticide (EPA Reg. No. 70506-57)
Bifenture® 10DF Insecticide/Miticide (EPA Reg. No. 70506-227)

Firm Name: United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Crop/Site/Commodity: Apples, Peaches, Nectarines

File Symbol: xxxxxxxx

Target Pest/Problem: Brown Marmorated Stink Bug (*Halyomorpha halys*)

Dosage: Apply 5.12 – 12.8 fl ozs (0.08-0.20 lbs ai) per acre of **Bifenture EC Agricultural Insecticide** (EPA Reg. No. 70506-57), **OR**

Apply 12.8 – 32.0 ozs (0.08-0.20 lbs ai) per acre of **Bifenture 10DF Insecticide/Miticide** (EPA Reg. No. 70506-227)

Use higher rates under heavy insect pressure.

Dilution Rate: **By Ground:** Apply as a dilute spray (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre).
For best control, thorough coverage is necessary.

Frequency/Timing of

Applications: Applications should be applied when populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Do not apply more than 32 fl ozs (0.50 lbs ai) of **Bifenture EC Agricultural Insecticide** or 80 ozs (0.50 lbs ai) of **Bifenture 10DF Insecticide/Miticide** per acre per season.

Apply as necessary to maintain control using a minimum of 30-day spray intervals.
Do not apply this product until after petal fall.
Do not graze livestock in treated orchards or cut treated cover crops for feed.

Restricted Entry

Interval (REI): 12 hours

Pre-Harvest Interval

(PHI): 14 days

Restricted Use Pesticide: When used in Maryland, applications can only be made by certified applicators or by persons under their direct supervision and only for those uses covered by the certified applicators certification.

This exemption is effective xxxx, 2013 through xxx, 2013.

ENCLOSURE

2012

FINAL REPORT

ON

USE OF BIFENTRHIN

TO CONTROL

BROWN MARMORATED STICK BUGS

ON POME FRUIT

IN MARYLAND



Maryland Department of Agriculture

Office of Plant Industries and Pest Management

Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor
Lewis R. Riley, Secretary
John R. Brooks, D.V.M., Deputy Secretary

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PESTICIDE REGULATION SECTION

(410) 841-5710

March 28, 2013

Ms. Tawanda Maignan, Team Leader
Emergency Response Team
US EPA Office of Pesticide Programs (7505P)
Document Processing Desk (EMEX)
1200 Pennsylvania Avenue, NW
Washington, DC 20460-001

Re: **Final Report** – File Symbol 12-MD- 04

Dear Ms. Maignan:

The following is a summary of the use of the bifenthrin products Brigade WSP Insecticide, manufactured by FMC Corporation, Bifenture EC and Bifenture 10 DF, manufactured by United Phosphorus, Inc., to control Brown marmorated stink bugs (*Halymorpha halys*) (Stal) (Hemiptera: Pentatomidae) on stone and pome (apples, peaches and nectarines) fruit in Maryland under the Section 18 granted for the 2012 growing season.

It is estimated that approximately 2,000 to 2,500 acres of stone and pome fruit were treated in Maryland under this Section 18. Growers reported good results in controlling Brown marmorated stink bugs with no adverse effects or environmental incidents reported. No violations were noted or enforcement actions taken in connection with this exemption. Your assistance in obtaining this specific exemption was greatly appreciated.

Sincerely,

Dennis W. Howard, Chief
Pesticide Regulation Section

DWH: dh

cc: Sec. 18 file

Dr. Fatima El Abdaou (EPA Region III)